

# Żongler- Limon Apa

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **47**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **70 C**, Time **40 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **40 min** at **70C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount     | Yield | EBC |
|-------|----------------------|------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (75%) | 80 %  | 5   |
| Grain | Strzegom Pilzneński  | 1 kg (25%) | 80 %  | 4   |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Ekuanot | 15 g   | 60 min | 14.5 %     |
| Aroma (end of boil) | Ekuanot | 15 g   | 20 min | 14.5 %     |
| Aroma (end of boil) | Ekuanot | 30 g   | 0 min  | 14.5 %     |